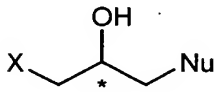
WHAT IS CLAIMED IS:

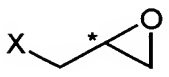
1. A process for preparing regioselectively an optically active 1-halogeno-2-hydroxypropyl compound of the following formula;



(4)

wherein X is halogen atom and Nu is a heteroatom having a substituent,

which comprises reacting an optically active epihalohydrin of the formula;



(1)

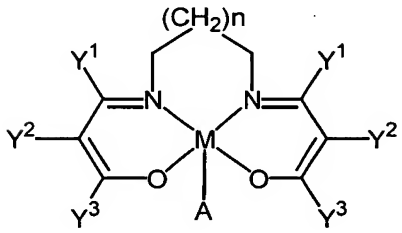
wherein X is halogen,

with a neucleophilic agent of the formula;

Nu-Q

wherein Q is hydrogen atom or silicon having a substituent and Nu is the same as defined above,

in the presence of a metal complex of the formula;

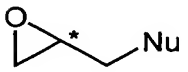


(2)

wherein n is an integer of 0, 1 or 2, Y^1, Y^2 and Y^3 are the same or different, hydrogen atom, halogen atom, nitro

group, alkyl group optionally substituted, aryl group optionally substituted, acyl group, or alkoxycarbonyl group, and Y^1 and Y^2, or Y^2 and Y^3, taken together with the carbon atoms to which they are attached, may form a ring, A is a counterion and M is a metal ion.

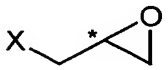
2. A process for preparing an optically active glycidyl compound of the formula;



(5)

wherein Nu is the same as define the above,

which comprises reacting an optically active epihalohydrin of the formula;



(1)

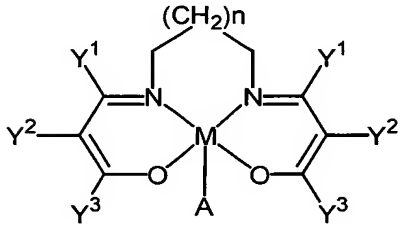
wherein X is the same as define above,

with a neucleophilic agent of the formula;

Nu-Q

wherein Q and Nu are the same as defined above,

in the presence of a metal complex of the formula;

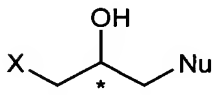


(2)

wherein n, Y^1, Y^2 and Y^3, and M are the same as defined

above,

to prepare regioselectively an optically active 1-halogeno-2-hydroxypropyl compound of the following formula;



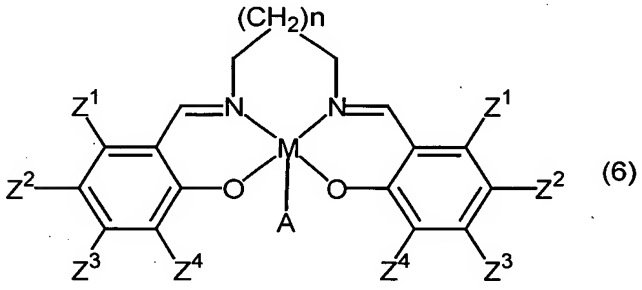
(4)

wherein X and Nu are the same as defined above,

and further subjecting the compound (4) to reaction with a base.

3. The process for a preparation of claim 1 or 2 wherein X in the formulae (1) and (4) is chlorine atom or bromine atom.

4. The process for a preparation of any one of claims 1-3 wherein the compound (2) is a compound of a following formula (6):



(6)

wherein n is an integer of 0, 1 or 2, Z^1, Z^2, Z^3 and Z^4 are the same or different, hydrogen atom, halogen atom, nitro group, straight alkyl group optionally substituted, aralkyl optionally substituted, aryl group optionally substituted, acyl group, alkyloxy optionally substituted,

aralkyloxy optionally substituted or aryloxy optionally substituted Z^1 and Z^2, Z^2 and Z^3, or Z^3 and Z^4, taken together with the carbon atoms to which they are attached, may form a ring, and A is a counterion and M is a metal ion.

5. The process for a preparation of any one of claims 1-4 wherein the neuclophilic agent (3) is a compound of a following formula (7):

R-OH

wherein R is hydrogen atom, straight or branched alkyl group, straight or branched alkylcarbonyl group, aralkyl group optionally substituted, aralkylcarbonyl group optionally substituted, aryl group optionally substituted or arylcarbonyl group optionally substituted.

6. The process for a preparation of any one of claims 1-5 wherein M in the compounds (2) and (6) is vanadium ion, chromium ion, manganese ion, iron ion, cobalt ion, nickel ion, molybdenum ion, ruthenium ion or tungsten ion.

7. The process for a preparation of any one of claims 1-6 wherein A in the compounds (2) and (6) is acetate, n-butyrate, (±)-comphorsulfonate, methanesulfonate, p-toluenesulfonate or trifluoromethanesulfonate.

8. The process for preparation of any one of claims 1-7 wherein the process for preparation for the compound (4) starting from the compound (1) is carried out in an ether as a reaction solvent.